

Case Report

A giant cutaneous horn of oral commissure: a case report

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ABSTRACT

Cutaneous horn is a conical, circumscribed, dense hyperkeratotic protrusion from skin with epithelial cornification. It is also known by the Latin name 'Cornu cutaneum'. This rare medical entity resembles animal horn but histological disparity is present between both. They are more commonly present in sun exposed sites or areas that are prone for actinic radiation, burns and hence frequently seen in forearm and upper part of face. Only few cases have been reported with cutaneous horns in unusual sites. Cutaneous horns occurring in oral cavity or perioral regions are extremely rare. The significance of knowing about this dead keratinous cutaneous horn is that it may occur as a part of or in association with a wide range of underlying pathologies, either malignant, premalignant or benign. Majority are due to benign pathologies. We report an unusual presentation of cutaneous horn in left oral commissure of a 45-year-old gentleman which is an extremely rare perioral location for such an ailment.

Keywords: Cutaneous horn, Lower lip, Oral commissure

INTRODUCTION

Cutaneous horns are dead hyperkeratotic lesions of skin which are morphologically similar to animal horns. They can be called as miniature animal horns or human horns. This rare entity is originating from dermal or epidermal layers of skin with dense hyperkeratotic body and epithelial cornification on its surface. Intense exposure to solar radiation is the common trigger factor. Sun exposed sites like forearm, face, scalp and ear are the usual locations of cutaneous horn.¹ Majority of these horns are associated with some underlying benign pathologies, but some are due to malignant or premalignant pathologies.² And the potential to become malignant or premalignant is also high in case of cutaneous horns. This association to hidden underlying neoplastic pathology, which is seldom detected preoperatively, makes this lesion significant in the field of medicine. Early adequate treatment which include complete excision with pathology free margins is necessary as considering the neoplastic potential of this

horns. Very rarely, they occur in uncommon sites like oral cavity. Only few cases of cutaneous horns at unusual location are published till now.³ We report a rare case of cutaneous horn of left oral commissure in a 45-year-old gentleman who presented to our hospital.

CASE REPORT

A 45 years old gentleman presented to the outpatient department with complaints of painless, gradually growing exophytic lesion in the left angle of mouth for last two years. It was not associated with any bleeding, discharge or previous history of trauma. Patient had history of acute coronary syndrome five years back and was on anti-platelets and statins. He underwent exploratory laparotomy 15 years back for hollow viscus perforation with uneventful post-operative period patient was moderately built and nourished with poor oral hygiene. There was a curved, firm, greyish-white horn like outgrowth of 25 millimetres length and base diameter

of 10 millimetres, projecting downwards noted on the left oral commissure. It has dry keratinized surface. (Figure 1 and 2) There were no palpable lymph nodes in the cervical region.



Figure 1: Preoperative image-lateral view.



Figure 2: Preoperative image-front view.

Routine investigations were found to be unremarkable. Patient underwent excision of the lesion with adequate margins and primary approximation of lip was done. (Figure 3 and 4). Histopathological evaluation shows densely packed central keratotic core with hyperkeratosis and parakeratosis, suggestive of cutaneous horn. The adjacent oral mucosa was inflamed with no atypical cells. Patient was discharged on second post-operative day and regular follow up was done.



Figure 3: Post-operative image.



Figure 4: Excision biopsy specimen.

DISCUSSION

‘Cornu cutaneum’ or cutaneous horn is a conical projection of hyperkeratotic material from skin.⁴ It presents as a well circumscribed, elongated or conical, dead keratotic lesion protruding above the skin with epithelial cornification. It looks similar to animal horns but histologically it is entirely different. In animal horns, there is superficial hyperkeratotic epidermis, dermis and axially placed inner bone which is absent in cutaneous horns.

Cutaneous horn was first documented in an elderly Welsh woman in London during 1588. Later in 1791, two English surgeons Everard Home and John Hunter described cutaneous horn as a medical condition.⁵

Cutaneous horn is a rare medical entity. Like other dermatological lesions, sun exposure is the major etiological factor in the formation of cutaneous horn. These are commonly seen in exposed areas like face, fore arm, ears and rarely in less sun exposed areas like nasal vestibule, lower lip, penis and legs.^{1,6} Angle of mouth is a comparatively unusual site for the occurrence of cutaneous horn. Giant cutaneous horns of lower lip are even more uncommon. On reviewing the literature only 10 such cases are reported.³ Among these four cases had presented with underlying malignancy.⁷⁻⁹

Cutaneous horn presents like a thick, firm, elongated structure with a length of few millimetres to several centimetres from skin. It may be conical, cylindrical, curved or twisted in shape. It may be single or multiple and may arise from superficial skin layer or from deeper dermis. The external surface is dry and keratinized with white, yellow, brown or black in colour. This dead keratin projection maybe an extension of an underlying pathology. It may be benign (seborrheic keratosis, molluscum contagiosum), premalignant (solar keratosis, arsenical keratosis or Bowens disease) or malignant (squamous cell carcinoma, basal cell carcinoma, Kaposi sarcoma or secondaries from a metastatic renal cell carcinoma).² Majority of cases are due to underlying benign pathology but 19-20% of cases are due to

malignant causes.³ Some of the risk factors related to the underlying malignancy in cutaneous horns include male gender, old age, larger lesions, tenderness at the base of lesion and history of sun exposure.^{10,11} Diagnosis of cutaneous horn is primarily based on clinical findings but the detection of underlying pathology is very important. Excision biopsy with adequate margin will help us to reach complete diagnosis of cutaneous horn.

Surgical excision with base remains the treatment of choice for cutaneous horns. Regional lymph node excision should be done depending to the underlying disease. In our case there was no underlying malignancy or premalignant lesion.

CONCLUSION

Cutaneous horn of oral commissure is a rare entity. Predominantly they are benign lesions. It is important to subject all cases of cutaneous horns for complete excision with disease free margins and proper histopathological examinations due to unpredictability regarding the underlying pathology.

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